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PATENT ABSTRACTS OF JAPAN

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(71) Applicant: **NIPPON TELEGR & TE <NTT>**

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(74) Representative:

(54) DIGITAL FM DETECTING AND DEMODULATING SYSTEM

(57) Abstract:

PURPOSE: To widely open an eye pattern to obtain an excellent error characteristic by shifting the sampling time by T/2 (T is the bit length).

CONSTITUTION: In the transmission side, input data bn is subjected to summation logic conversion to generate new data an and this data has the frequency modulated and is transmitted and in the reception side, a clock synchronizing circuit 8 is used to generate a T/2 bit offset sampling clock from the output of a frequency detector 4. Meanwhile, the detection output is inputted to comparators 6 and 7, and comparison levels are inputted from an input terminal 5, and the comparator 6 compares the detection output with a voltage V and the comparator 7 compares the

frequency detection output with a voltage -V. Comparator outputs are read into D flip flops by the clock, and reproduced data bn is obtained by exclusive OR 10. Thus, a characteristic superior in error rate is obtained.